

REMARKS/ARGUMENTS

In this response, claims 1, 12, 17, and 51 are being amended, claims 32-50 are being canceled, and claims 59-66 are being added. Thus, after entry of the amendment, claims 1-31 and 51-66 will be pending in the application. Reconsideration and allowance of the application in view of the above amendments and the remarks below is respectfully requested.

Claim 1 is being amended to make explicit that the device is “for monitoring a heart”. Claim 1 is also being amended to specify that (1) the first electrode arrangement is “suitable for coupling to the heart with a first electrode interface impedance”, (2) the second electrode arrangement is “suitable for coupling to the heart with a second electrode interface impedance”, (3) the signal processor is configured to separate “a cardiac source signal from another physiological source signal”, the cardiac signal “having a first source impedance associated therewith” and the another physiological signal “having a second source impedance associated therewith different from the first source impedance”, and (4) the “first electrode interface impedance is smaller than the first and second source impedances”, and the “second electrode interface impedance is [also] smaller than the first and second source impedances”. Support for these amendments can be found throughout the original application, e.g., pages 16-18 of the specification. No new matter has been added.

Claim 12 is being amended to incorporate the subject matter of original claim 1, except that the original phrase “configured to have a first amplifier input and a second amplifier input” is replaced with “including a first amplifier having a first amplifier input and a second amplifier having a second amplifier input” so as to positively recite the “first amplifier” and “second amplifier”. No new matter has been added.

Withdrawn claim 17 is being amended to make explicit that the device is “for monitoring a heart”. The claim is also being amended to recite that the electrode arrangement is “suitable for coupling to the heart with an electrode interface impedance”. The claim is further being amended to specify that the signal processor is configured to separate “a cardiac source signal from another physiological source signal”, that the cardiac source signal has “a first source impedance associated therewith”, that the another

physiological signal has “a second source impedance associated therewith different from the first source impedance”, and that “the electrode interface impedance is smaller than the first and second source impedances”. Support can be found, for example, on pages 16-18 of the specification. No new matter has been added.

Claim 51 is being amended to make explicit that it is a device “for monitoring a heart”. It is also being amended to recite that the separating means is for separating “a cardiac signal from another physiological signal”, and that the “second impedance attenuates the cardiac source signal component of the second composite signal relative to the cardiac source signal component of the first composite signal”. Support can be found e.g. at pages 7-8 and 16-18 of the specification. No new matter has been added.

Dependent claims 59-66 are being added to add further patentable limitations to respective ones of base claims 1, 12, and 51. Support can be found throughout the original application. No new matter has been added.

Restriction-Related Issues

The undersigned noticed that numbered paragraphs 4 and 5 of the Office Action appeared to be inconsistent, since paragraph 4 withdrew the alleged species C (which had been associated with claim 51) from the Restriction Requirement, yet paragraph 5 included claim 51 in the list of withdrawn claims. In a teleconference between the undersigned and the Examiner on Sept. 22, 2008, agreement was reached that claims 51 and 55-58 should not be included in the list of withdrawn claims, while claims 52-54 should be included in that list due to their incorporation of the “switching” feature associated with non-elected species B. The undersigned thanks the Examiner for the clarification.

To summarize, after entry of this amendment, 1-31 and 51-66 will be pending in the application, of which claims 17-31 and 52-54 are presently withdrawn from consideration.

Applicants have canceled without prejudice the non-elected method claims 32-50. Applicants respectfully request rejoinder of the device claims directed to the “switching” feature upon allowance of a generic claim, e.g. independent claim 51.

Claim Rejections - §112

The Office Action rejected claims 12-16 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to point out and claim the subject matter. The Examiner pointed out that “the first and second amplifiers” in claim 12 were not positively recited in claim 1.

In response, claim 12 has been rewritten in independent form to incorporate the language of original claim 1 except that the original phrase “configured to have a first amplifier input and a second amplifier input” is replaced with “including a first amplifier having a first amplifier input and a second amplifier having a second amplifier input” so as to positively recite the “first amplifier” and “second amplifier”. Withdrawal of the rejection of claim 12, and its dependent claims 13-16, is respectfully requested.

Claim Rejections - §102

The Office Action rejected claims 1-11 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Application Publication US 2001/0021813 (Yonce).

In response, claim 1 has been amended to more clearly distinguish over Yonce. In particular, the claim now recites that the signal processor is configured to separate a cardiac source signal, having a first source impedance associated therewith, from another physiological source signal, having a second source impedance associated therewith. The last clause of amended claim 1 specifies that these first and second source impedances are both larger than electrode interface impedances associated with the first and second electrode arrangements.

In contrast to this, the voltage sensing system of Yonce adjusts the impedance of a second input circuit in order to reduce common mode noise associated with differences in skin-electrode interface impedance and the like. See paragraphs 4, 28, 30, and 32-34. Yonce substantially offsets, corrects, or compensates for effects of the impedance mismatch

between electrodes. See paragraph 34. Yonce is not concerned with separating a cardiac source signal, having a first source impedance associated therewith, from another physiological source signal, having a second source impedance associated therewith, the first and second source impedances both being larger than electrode interface impedances associated with first and second electrode arrangements.

Without teaching every element of claim 1, Yonce cannot anticipate that claim or its dependent claim. The rejection of claims 1-11 under § 102 cannot be sustained and should be withdrawn.

To the extent Applicants have not responded to any characterization by the Examiner of the asserted art or of Applicants' claimed subject matter, or to any application by the Examiner of the asserted art to any claimed subject matter, Applicants wish to make clear for the record that any such lack of response should not be interpreted as an acquiescence to such characterizations or applications. A detailed discussion of each of the Examiner's characterizations, or any other assertions or statements beyond that provided above is unnecessary. Applicants reserve the right to address in detail any such assertions or statements in future prosecution.

CONCLUSION

The application is submitted to be in condition for allowance, the early indication of which is earnestly solicited. If the Examiner believes it necessary or helpful, the Examiner is invited to contact the undersigned attorney to discuss any issues related to this case.

Respectfully submitted,

HOLLINGSWORTH & FUNK, LLC
8009 34th Avenue South, Suite 125
Minneapolis, MN 55425
952.854.2700

By: /Stephen C. Jensen/

Stephen C. Jensen
Reg. No. 35,207